# Techniques of the Comprehensive Physical Examination

#### Objectives

- Review the general approach and systematic method used in performing a comprehensive PE
  - Pathophys will discuss abnormal findings specific to disease
  - Patient Assessment will discuss focusing the PE as needed
  - Use small group discussions to define the issues

#### Discussion Groups

- Group 1
  - Daniel, Stephanie, Kristine, Elvie
- Group 2
  - Jennifer P, Roy, Jennifer D
- Group 3
  - Angela, Crystal, Aaron

#### Discussion Group Guidelines

- Work as a Team
- Everyone contributes to the success & failure of the Team
- Respect each team member's ideas
- Rotate the role of team leader, notetaker, and spokesperson
- Open your minds; Think Broadly
- Learn from each other

#### Techniques Used in Physical Exam

- Inspection
- Palpation
- Percussion
- Auscultation

#### Percussion

| Table 2-1 Percussion Sounds |                |           |        |          |                       |
|-----------------------------|----------------|-----------|--------|----------|-----------------------|
| Sound                       | Description    | Intensity | Pitch  | Duration | Location              |
| Tympany                     | Drumlike       | Loud      | High   | Medium   | Stomach               |
| Hyperresonance              | Booming        | Loud      | Low    | Long     | Hyperinflated<br>lung |
| Resonance                   | Hollow         | Loud      | Low    | Long     | Normal lung           |
| Dull                        | Thud           | Medium    | Medium | Medium   | Solid organs—liver    |
| Flat                        | Extremely dull | Soft      | High   | Short    | Muscle, atelectasis   |

#### Other Data Obtained

- Vital Signs
  - Pulse
  - Ventilations (Respirations)
  - Blood Pressure
  - Temperature
- Height
- Weight
- Spo<sub>2</sub>

# **Breathing Patterns**

| Table 2-2                              | Breathing Patterns |   |  |  |  |
|--|--------------------|---|--|--|--|
|  | Condition          | Description   | Causes   |  |  |
| <b>\\\\\</b>                           | Eupnea             | Normal breathing rate and pattern                                     |  |  |  |
| $\mathcal{M}$                          | Tachypnea          | Increased respiratory rate  | Fever, anxiety, exercise, shock                          |  |  |
| ~~~                                    | Bradypnea          | Decreased respiratory rate  | Sleep, drugs, metabolic disorder, head injury, stroke    |  |  |
|  | Apnea              | Absence of breathing  | Deceased patient, head injury, stroke                    |  |  |
| $\bigvee\bigvee\bigvee$                | Hyperpnea          | Normal rate, but deep respirations                                    | Emotional stress, diabetic ketoacidosis                  |  |  |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Cheyne-Stokes      | Gradual increases and decreases in respirations with periods of apnea | Increasing intracranial pressure, brain stem injury      |  |  |
| <b>\\\\\</b>                           | Biot's             | Rapid, deep respirations (gasps) with short pauses between sets       | Spinal meningitis, many CNS causes, head injury          |  |  |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Kussmaul's         | Tachypnea and hyperpnea   | Renal failure, metabolic acidosis, diabetic ketoacidosis |  |  |
| ımmmı                                  | Apneustic          | Prolonged inspiratory phase with shortened expiratory phase           | Lesion in brain stem                                     |  |  |

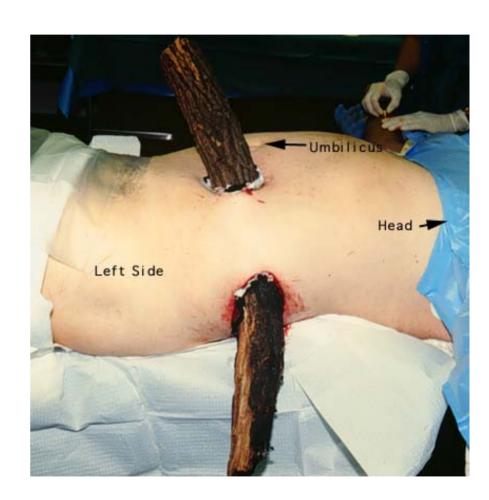
## Elements of the Comprehensive Physical Exam

- General Survey
- Mental Status
- Vital Signs
- HEENT
- Neck
- Chest

- Abdomen
- Pelvis (as needed)
- Posterior Body
- Extremities
  - Vascular
  - Musculoskeletal
- Neurologic Exam

#### In the Beginning

- Begin with Comp PE or Focus on CC?
  - What determines the direction you take?
  - Why?



#### **Mental Status**

- AVPU vs A&O X 4
  - What's the difference?
  - When do you use one vs the other?
- Non-Useful Terms to Avoid
- What are other ways of assessing?
- What does mental status tell you about the patient?
- Group Discussions

- Appearance & Behavior
  - Posture & Motor Activity
  - Dress, Grooming & Personal Hygiene
  - Facial Expression
  - Speech & Language

- Mood
- Thoughts & Perceptions
- Insight & Judgment
- Memory & Attention

#### • Class Exercise

- You will have 3-5 seconds to view a scene and patient
- Once you have done this, return to your desk and write down everything you know or suspect about the patient

- Apparent <u>State</u> of <u>Health</u>
  - Before beginning the actual physical exam,
    - What are the clues?
    - What might they tell you?
    - How would these things affect your physical exam?
- Group Discussions

- General Physical Appearance
  - Height, Weight & Build
  - Sexual & Physical Development
  - Posture, Gait & Motor Activity
  - Hair, Nails & Skin appearance
  - Dress, Grooming & Personal Hygiene
  - Odors
  - Facial Expressions & Body Language

#### Additions to the General Assessment

- Vital Signs
  - Blood Pressure
    - Palp or auscultated
  - Pulse
    - Pulse or Heart Rate
  - Ventilations
    - Ventilations or Respirations
  - Pulse Oximetry
  - Temperature